



# UNITED STATES PATENT AND TRADEMARK OFFICE

9  
UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,347	08/26/2003	Jian J. Chen	2328-050A	3505

7590 11/28/2007  
LOWE HAUPTMAN GILMAN & BERNER, LLP  
Suite 300  
1700 Diagonal Road  
Alexandria, VA 22314

EXAMINER

ALEJANDRO MULERO, LUZ L

ART UNIT

PAPER NUMBER

1792

MAIL DATE

DELIVERY MODE

11/28/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



UNITED STATES DEPARTMENT OF COMMERCE

U.S. Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
10647347	8/26/03	CHEN ET AL.	2328-050A

EXAMINER

Luz L. Alejandro

ART UNIT	PAPER
----------	-------

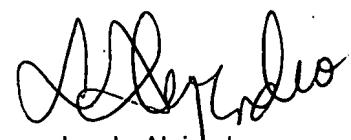
1792 20071116

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner for Patents

See the attached Examiner's Answer.



Luz L. Alejandro  
Primary Examiner  
Art Unit: 1792



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents  
United States Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/647,347

Filing Date: August 26, 2003

Appellant(s): CHEN ET AL.

**MAILED**  
**NOV 28 2007**  
**GROUP 1700**

---

Allan M. Lowe  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 8/17/07 appealing from the Office action  
mailed 09/01/06.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct. The amendment after final rejection filed on 12/15/06 has been entered.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

US 5,795,429	ISHII et al.	08-1998
US 5,690,781	YOSHIDA et al.	11-1997
US 5,983,828	SAVAS	11-1999
WO 00/58993	NI et al.	10-2000
US 6,164,241	CHEN et al.	12-2000
US 6,288,493	LEE et al.	09-2001

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 32-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishii et al., U.S. Patent 5,795,429 in view of Yoshida et al., U.S. Patent 5,690,781 and Savas, U.S. Patent 5,983,828.

Ishii et al. shows the invention substantially as claimed including a method of manufacturing an inductive plasma processor, each processor including a plasma excitation coil 24 having plural parallel electrically connected windings (24a, 24b), each of the windings having a pair of excitation terminals, the windings of each coil being adapted to be driven by an excitation source arrangement so that different currents simultaneously flow through the pair of excitation terminals of each winding, the plural windings of each coil being arranged so that an exterior winding of the coil is about an interior winding of the coil, the exterior winding and the interior winding being about an axis of the coil, the method comprising positioning the exterior winding relative to the

remainder of the coil so the plasma density incident on the workpiece has a predetermined desired relationship (see fig. 9 and its description).

Ishii et al. does not expressly disclose the positioning step including turning the exterior winding and another winding of the coil relative to each other about the axis; the exterior winding being turned relative to the another winding to assist in controlling azimuthal electric field distribution and azimuthal plasma density distribution of the processor; and the method being performed on a plurality of different processors of the same type having differing azimuthal electric field and plasma density distributions from processor to processor and the exterior winding of each particular processor is turned relative to the remainder of the coil of the particular processor until tests indicate optimum uniform plasma distribution is achieved in each processor. Yoshida et al. discloses moving a coil to assist in controlling the electric field distribution and plasma density distribution of the processor (see figs. 6A-6B and their descriptions). In view of this disclosure, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the process of Ishii et al. so as to include the claimed positioning step in order to achieve a uniform plasma distribution.

Concerning wherein the method is performed on a plurality of different processors of the same type having differing azimuthal electric field and plasma density distributions from processor to processor and the exterior winding of each particular processor is turned relative to the remainder of the coil of the particular processor until tests indicate optimum uniform plasma distribution is achieved in each processor, Savas discloses an apparatus with different processors 102a, 102b that operate independently

(see fig. 1 and its description). In view of this disclosure, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the process of Ishii et al. modified by Toshiba et al. so as to use this process on a plurality of different processors because in such a way each processor can have its plasma distribution adjusted based upon the particular process being conducted in the processor.

Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made that it is a common practice in manufacturing processes to produce more than one product, in this case inductive plasma processors, in order to achieve financial gain since more than one product can be made and/or be sold.

Claims 32-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishii et al., U.S. Patent 5,795,429 in view of Ni et al., WO 00/58993 and Savas, U.S. Patent 5,983,828.

Ishii et al. shows the invention substantially as claimed including a method of manufacturing an inductive plasma processor, each processor including a plasma excitation coil 24 having plural parallel electrically connected windings (24a, 24b), each of the windings having a pair of excitation terminals, the windings of each coil being adapted to be driven by an excitation source arrangement so that different currents simultaneously flow through the pair of excitation terminals of each winding, the plural windings of each coil being arranged so that an exterior winding of the coil is about an

interior winding of the coil, the exterior winding and the interior winding being about an axis of the coil, the method comprising positioning the exterior winding relative to the remainder of the coil so the plasma density incident on the workpiece has a predetermined desired relationship (see fig. 9 and its description).

Ishii et al. does not expressly disclose the positioning step including turning the exterior winding and another winding of the coil relative to each other about the axis; the exterior winding being turned relative to the another winding to assist in controlling azimuthal electric field distribution and azimuthal plasma density distribution of the processor; and the method being performed on a plurality of different processors of the same type having differing azimuthal electric field and plasma density distributions from processor to processor and the exterior winding of each particular processor is turned relative to the remainder of the coil of the particular processor until tests indicate optimum uniform plasma distribution is achieved in each processor. Ni et al. discloses moving different positions or changing the relative angular position of a coil to assist in controlling the electric field distribution and plasma density distribution of the processor (see figs. 1-2 and their description). In view of this disclosure, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the process of Ishii et al. so as to include the claimed positioning step in order to achieve a more controlled plasma distribution.

Concerning wherein the method is performed on a plurality of different processors of the same type having differing azimuthal electric field and plasma density distributions from processor to processor and the exterior winding of each particular

processor is turned relative to the remainder of the coil of the particular processor until tests indicate optimum uniform plasma distribution is achieved in each processor, Savas discloses an apparatus with different processors 102a, 102b that operate independently (see fig. 1 and its description). In view of this disclosure, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the process of Ishii et al. modified by Ni et al. so as to use this process on a plurality of different processors because in such a way each processor can have its plasma distribution adjusted based upon the particular process being conducted in the processor.

Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made that it is a common practice in manufacturing processes to produce more than one product, in this case inductive plasma processors, in order to achieve financial gain since more than one product can be made and/or be sold.

Claims 32-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al., U.S. Patent 6,164,241 in view of Yoshida et al., U.S. Patent 5,690,781 and Savas, U.S. Patent 5,983,828.

Chen et al. shows the invention substantially as claimed including a method of manufacturing an inductive plasma processor, each processor including a plasma excitation coil having plural parallel electrically connected windings, each of the windings having a pair of excitation terminals, the windings of each coil being adapted to be driven by an excitation source arrangement so that different currents

simultaneously flow through the pair of excitation terminals of each winding, the plural windings of each coil being arranged so that an exterior winding of the coil is about an interior winding of the coil, the exterior winding and the interior winding being about an axis of the coil, the method comprising positioning the exterior winding relative to the remainder of the coil so the plasma density incident on the workpiece has a predetermined desired relationship (see fig. 6 and its description).

Chen et al. does not expressly disclose the positioning step including turning the exterior winding and another winding of the coil relative to each other about the axis; the exterior winding being turned relative to the another winding to assist in controlling azimuthal electric field distribution and azimuthal plasma density distribution of the processor; and the method being performed on a plurality of different processors of the same type having differing azimuthal electric field and plasma density distributions from processor to processor and the exterior winding of each particular processor is turned relative to the remainder of the coil of the particular processor until tests indicate optimum uniform plasma distribution is achieved in each processor. Yoshida et al. discloses moving a coil to assist in controlling the electric field distribution and plasma density distribution of the processor (see figs. 6A-6B and their descriptions). In view of this disclosure, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the process of Chen et al. so as to include the claimed positioning step in order to achieve a uniform plasma distribution.

Concerning wherein the method is performed on a plurality of different processors of the same type having differing azimuthal electric field and plasma density

distributions from processor to processor and the exterior winding of each particular processor is turned relative to the remainder of the coil of the particular processor until tests indicate optimum uniform plasma distribution is achieved in each processor, Savas discloses an apparatus with different processors 102a, 102b that operate independently (see fig. 1 and its description). In view of this disclosure, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the process of Chen et al. modified by Toshiba et al. so as to use this process on a plurality of different processors because in such a way each processor can have its plasma distribution adjusted based upon the particular process being conducted in the processor.

Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made that it is a common practice in manufacturing processes to produce more than one product, in this case inductive plasma processors, in order to achieve financial gain since more than one product can be made and/or be sold.

Claims 32-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al., U.S. Patent 6,164,241 in view of Ni et al., WO 00/58993 and Savas, U.S. Patent 5,983,828.

Chen et al. shows the invention substantially as claimed including a method of manufacturing an inductive plasma processor, each processor including a plasma excitation coil having plural parallel electrically connected windings, each of the

windings having a pair of excitation terminals, the windings of each coil being adapted to be driven by an excitation source arrangement so that different currents simultaneously flow through the pair of excitation terminals of each winding, the plural windings of each coil being arranged so that an exterior winding of the coil is about an interior winding of the coil, the exterior winding and the interior winding being about an axis of the coil, the method comprising positioning the exterior winding relative to the remainder of the coil so the plasma density incident on the workpiece has a predetermined desired relationship (see fig. 6 and its description).

Chen et al. does not expressly disclose the positioning step including turning the exterior winding and another winding of the coil relative to each other about the axis; the exterior winding being turned relative to the another winding to assist in controlling azimuthal electric field distribution and azimuthal plasma density distribution of the processor; and the method being performed on a plurality of different processors of the same type having differing azimuthal electric field and plasma density distributions from processor to processor and the exterior winding of each particular processor is turned relative to the remainder of the coil of the particular processor until tests indicate optimum uniform plasma distribution is achieved in each processor. Ni et al. discloses moving different positions of a coil to assist in controlling the electric field distribution and plasma density distribution of the processor (see figs. 1-2 and their description). In view of this disclosure, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the process of Chen et al. so as to include the claimed positioning step in order to achieve a more controlled plasma distribution.

Concerning wherein the method is performed on a plurality of different processors of the same type having differing azimuthal electric field and plasma density distributions from processor to processor and the exterior winding of each particular processor is turned relative to the remainder of the coil of the particular processor until tests indicate optimum uniform plasma distribution is achieved in each processor, Savas discloses an apparatus with different processors 102a, 102b that operate independently (see fig. 1 and its description). In view of this disclosure, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the process of Chen et al. modified by Ni et al. so as to use this process on a plurality of different processors because in such a way each processor can have its plasma distribution adjusted based upon the particular process being conducted in the processor.

Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made that it is a common practice in manufacturing processes to produce more than one product, in this case inductive plasma processors, in order to achieve financial gain since more than one product can be made and/or be sold.

Claims 32-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al., U.S. Patent 6,288,493 in view of Yoshida et al., U.S. Patent 5,690,781 and Savas, U.S. Patent 5,983,828.

Lee et al. shows the invention substantially as claimed including a method of manufacturing an inductive plasma processor, each processor including a plasma

excitation coil 310 having plural parallel electrically connected windings (310a, 310b, 310c, 310d), each of the windings having a pair of excitation terminals, the windings of each coil being adapted to be driven by an excitation source arrangement so that different currents simultaneously flow through the pair of excitation terminals of each winding, the plural windings of each coil being arranged so that an exterior winding 310c of the coil is about an interior winding of the coil, the exterior winding and the interior winding being about an axis of the coil, the method comprising positioning the exterior winding relative to the remainder of the coil so the plasma density incident on the workpiece has a predetermined desired relationship (see fig. 3B and its description).

Lee et al. does not expressly disclose the positioning step including turning the exterior winding and another winding of the coil relative to each other about the axis; the exterior winding being turned relative to the another winding to assist in controlling azimuthal electric field distribution and azimuthal plasma density distribution of the processor; and the method being performed on a plurality of different processors of the same type having differing azimuthal electric field and plasma density distributions from processor to processor and the exterior winding of each particular processor is turned relative to the remainder of the coil of the particular processor until tests indicate optimum uniform plasma distribution is achieved in each processor. Yoshida et al. discloses moving a coil to assist in controlling the electric field distribution and plasma density distribution of the processor (see figs. 6A-6B and their descriptions). In view of this disclosure, it would have been obvious to one of ordinary skill in the art at the time

the invention was made to modify the process of Lee et al. so as to include the claimed positioning step in order to achieve a uniform plasma distribution.

Concerning wherein the method is performed on a plurality of different processors of the same type having differing azimuthal electric field and plasma density distributions from processor to processor and the exterior winding of each particular processor is turned relative to the remainder of the coil of the particular processor until tests indicate optimum uniform plasma distribution is achieved in each processor, Savas discloses an apparatus with different processors 102a, 102b that operate independently (see fig. 1 and its description). In view of this disclosure, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the process of Lee et al. modified by Toshiba et al. so as to use this process on a plurality of different processors because in such a way each processor can have its plasma distribution adjusted based upon the particular process being conducted in the processor.

Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made that it is a common practice in manufacturing processes to produce more than one product, in this case inductive plasma processors, in order to achieve financial gain since more than one product can be made and/or be sold.

Claims 32-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al., U.S. Patent 6,288,493 in view of Ni et al., WO 00/58993 and Savas, U.S. Patent 5,983,828.

Lee et al. shows the invention substantially as claimed including a method of manufacturing an inductive plasma processor, each processor including a plasma excitation coil 310 having plural parallel electrically connected windings (310a, 310b, 310c, 310d), each of the windings having a pair of excitation terminals, the windings of each coil being adapted to be driven by an excitation source arrangement so that different currents simultaneously flow through the pair of excitation terminals of each winding, the plural windings of each coil being arranged so that an exterior winding 310c of the coil is about an interior winding of the coil, the exterior winding and the interior winding being about an axis of the coil, the method comprising positioning the exterior winding relative to the remainder of the coil so the plasma density incident on the workpiece has a predetermined desired relationship (see fig. 3B and its description).

Lee et al. does not expressly disclose the positioning step including turning the exterior winding and another winding of the coil relative to each other about the axis; the exterior winding being turned relative to the another winding to assist in controlling azimuthal electric field distribution and azimuthal plasma density distribution of the processor; and the method being performed on a plurality of different processors of the same type having differing azimuthal electric field and plasma density distributions from processor to processor and the exterior winding of each particular processor is turned relative to the remainder of the coil of the particular processor until tests indicate

optimum uniform plasma distribution is achieved in each processor. Ni et al. discloses moving different positions of a coil to assist in controlling the electric field distribution and plasma density distribution of the processor (see figs. 1-2 and their description). In view of this disclosure, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the process of Lee et al. so as to include the claimed positioning step in order to achieve a more controlled plasma distribution.

Concerning wherein the method is performed on a plurality of different processors of the same type having differing azimuthal electric field and plasma density distributions from processor to processor and the exterior winding of each particular processor is turned relative to the remainder of the coil of the particular processor until tests indicate optimum uniform plasma distribution is achieved in each processor, Savas discloses an apparatus with different processors 102a, 102b that operate independently (see fig. 1 and its description). In view of this disclosure, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the process of Lee et al. modified by Ni et al. so as to use this process on a plurality of different processors because in such a way each processor can have its plasma distribution adjusted based upon the particular process being conducted in the processor.

Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made that it is a common practice in manufacturing processes to produce more than one product, in this case inductive plasma processors, in order to achieve financial gain since more than one product can be made and/or be sold.

**(10) Response to Argument**

Appellant argues that Ishii et al. has no disclosure of the windings 24A and 24B being moved relative to each other or the method being performed on several different processors. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). It should be noted that the references of Yoshida et al. and Ni et al. are being relied upon to show the movement of the windings relative to each other, and that the reference of Savas is being relied upon to show the teaching of performing the method on plurality of processors.

Appellant argues that Chen et al. has no disclosure of coils 1 and 2 being moved relative to each other. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). It should be noted that the references of Yoshida et al. and Ni et al. are being relied upon to show the movement of the windings relative to each other.

Appellant argues that Lee et al. has no disclosure of the windings 310a, 310b, and 310c being moved relative to each other or the method being performed on several different processors. In response to applicant's arguments against the references

individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). It should be noted that the references of Yoshida et al. and Ni et al. are being relied upon to show the movement of the windings relative to each other, and that the reference of Savas is being relied upon to show the teaching of performing the method on plurality of processors.

Appellant argues that Savas does not disclose a method of manufacturing many different inductive plasma processors of the same type or a method that is performed on several (three or more) processors. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., method performed on three or more processors) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Furthermore, in response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Additionally, it would have been obvious to one having ordinary skill in the art at the time the invention was made that it is a common practice in manufacturing processes to

produce more than one product, in this case inductive plasma processors, in order to achieve financial gain since more than one product can be made and/or be sold.

Appellant argues that Yoshida et al. fails to disclose moving interior and exterior windings of a coil relative to each other. The examiner respectfully disagrees and contends that Yoshida et al. does disclose that the interior and exterior windings move relative to each other since motor 23 moves the windings. It should be noted that the inside winding of the coil of Yoshida et al. will move more and/or faster than the outside winding. Furthermore, the claims do not require two coils instead they only require two windings, and therefore, as broadly claimed, it is believed that the teachings of Yoshida et al. are proper and the rejection over the reference is respectfully maintained.

Appellant argues that Ni et al. does not disclose a coil where the interior and exterior windings are moved or turned relative to each other. The examiner respectfully disagrees and contends that, as stated in the above and the final rejection, Ni et al. discloses moving interior and exterior windings relative to each other in order to assist in controlling the electric field distribution and plasma density distribution of the processor.

Appellant argues that Ishii et al. is not concerned with the problems set forth in Section VII.A of the Appeal brief associated with manufacturing many different inductive plasma processors of the same type. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made that it is a common practice in manufacturing processes to produce more than one product, in this case inductive plasma processors, in order to achieve financial gain since more than one product can be made and/or be sold.

Appellant argues that the combination of the Ishii et al., Yoshida et al. and Savas references is incorrect because neither Yoshida et al. nor Savas is concerned with a method of manufacturing many different inductive plasma processors. However, as stated above, it would have been obvious to one having ordinary skill in the art at the time the invention was made that it is a common practice in manufacturing processes to produce more than one product, in this case inductive plasma processors, in order to achieve financial gain since more than one product can be made and/or be sold.

Appellant argues that the Yoshida et al. reference is concerned with moving the coil of a single plasma processor. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). It should be noted that the reference of Savas is being relied upon to show the teaching of performing the method on plurality of processors.

Appellant argues that Ni et al. shows movement of a single winding on a preprogrammed basis in response to recipes stored in memory, rather than in response to testing. The examiner respectfully disagrees with the statement that Ni et al. shows movement of a single winding. It is clear from fig. 2 of the Ni et al. reference that motors 201, 202, and 203 are connected to different windings of the plasma excitation coil of Ni et al. and that each motor can be moved independently from the other two and therefore, a position of an interior winding can be moved relative to a position of an exterior winding. Furthermore, it should be noted that the claims do not require two coils

instead they only require two windings, and therefore, as broadly claimed, it is believed that the teachings of Ni et al. are proper and the rejection over the reference is respectfully maintained. Additionally, it would be obvious to one having ordinary skill in the art at the time the invention was made, that the recipes stored in memory to move the windings in the apparatus of Ni et al. are made by trial and error and/or in response to testing in order to control the electric field distribution and the plasma density distribution of the processor.

Appellant argues that the Ni et al. reference is concerned with moving the coil of a single plasma processor. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). It should be noted that the reference of Savas is being relied upon to show the teaching of performing the method on plurality of processors.

Appellant argues that the combination of the Ishii et al., Ni et al. and Savas references is incorrect because neither Yoshida et al. nor Savas is concerned with a method of manufacturing many different inductive plasma processors. However, as stated above, it would have been obvious to one having ordinary skill in the art at the time the invention was made that it is a common practice in manufacturing processes to produce more than one product, in this case inductive plasma processors, in order to achieve financial gain since more than one product can be made and/or be sold.

Appellant argues that Chen et al. is not concerned with the problems set forth in Section VII.A of the Appeal brief associated with manufacturing many different inductive plasma processors of the same type. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made that it is a common practice in manufacturing processes to produce more than one product, in this case inductive plasma processors, in order to achieve financial gain since more than one product can be made and/or be sold.

Appellant argues that the combination of the Chen et al., Yoshida et al. and Savas references is incorrect because neither Yoshida et al. nor Savas is concerned with a method of manufacturing many different inductive plasma processors. However, as stated above, it would have been obvious to one having ordinary skill in the art at the time the invention was made that it is a common practice in manufacturing processes to produce more than one product, in this case inductive plasma processors, in order to achieve financial gain since more than one product can be made and/or be sold.

Appellant argues that the combination of the Chen et al., Ni et al. and Savas references is incorrect because neither Ni et al. nor Savas is concerned with a method of manufacturing many different inductive plasma processors. However, as stated above, it would have been obvious to one having ordinary skill in the art at the time the invention was made that it is a common practice in manufacturing processes to produce more than one product, in this case inductive plasma processors, in order to achieve financial gain since more than one product can be made and/or be sold.

Appellant argues that Lee et al. is not concerned with the problems set forth in Section VII.A of the Appeal brief associated with manufacturing many different inductive plasma processors of the same type. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made that it is a common practice in manufacturing processes to produce more than one product, in this case inductive plasma processors, in order to achieve financial gain since more than one product can be made and/or be sold.

Appellant argues that the combination of the Lee et al., Yoshida et al. and Savas references is incorrect because neither Yoshida et al. nor Savas is concerned with a method of manufacturing many different inductive plasma processors. However, as stated above, it would have been obvious to one having ordinary skill in the art at the time the invention was made that it is a common practice in manufacturing processes to produce more than one product, in this case inductive plasma processors, in order to achieve financial gain since more than one product can be made and/or be sold.

Appellant argues that the combination of the Lee et al., Ni et al. and Savas references is incorrect because neither Ni et al. nor Savas is concerned with a method of manufacturing many different inductive plasma processors. However, as stated above, it would have been obvious to one having ordinary skill in the art at the time the invention was made that it is a common practice in manufacturing processes to produce more than one product, in this case inductive plasma processors, in order to achieve financial gain since more than one product can be made and/or be sold.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,



LUZ ALEJANDRO-MULERO  
PRIMARY EXAMINER

Conferees:



PARVIZ HASSANZADEH  
SUPERVISORY PATENT EXAMINER

  
GREGORY MILLS  
QUALITY ASSURANCE SPECIALIST